UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,169	11/26/2003	Daniel Mulligan	SIG000114	5741

34399 7590 12/01/2005

GARLICK HARRISON & MARKISON LLP
P.O. BOX 160727
AUSTIN, TX 78716-0727

EXAMINER	
CHANG, DANIEL D	

ART UNIT	PAPER NUMBER
2819	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/723,169	Applicant(s) MULLIGAN ET AL.	
	Examiner Daniel D. Chang	Art Unit 2819	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 14 November 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *1-24*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
13. ☐ Other: _____.

DANIEL CHANG
PRIMARY EXAMINER

Daniel D. Chang
Primary Examiner
Art Unit: 2819

Explanation of how the amended or request for reconsideration would be rejected

On page 10 of the argument filed 11/14/05, Applicant argues that "McMahan does not teach that the various buffers may be tri-stated (e.g., on, off, or in a high impedance state), but teaches that they the buffers are either connected via a coupling tranistor to the output pin or not. Thus, McMahan does not teach or suggest a second driver as is claimed in claim 1." However, McMahan teaches that the input at node 48 may either be a data input (col. 4, lines 24+) which means data input can be either in logic 0 (OFF) or 1 (ON). Also, McMahan teaches that "control signals C0, C1, and Cn respectively function to couple each of buffers 42, 44, 46 to the output pin by controlling a coupling transistor within each of the buffers to couple the output of the buffer to the output pin (col. 4, lines 39+) and each of buffers 42, 44, and 46 may be inplemented with any type of known buffer circuit structure (col. 4, lines 43+). Therefore when any of the control signals C0, C1, and Cn are enabled, the output pin 49 is either ON or OFF depending upon the state of the input signal at 48 and when the control signals C0, C1, and Cn are disabled, the output pin 49 is in high impedance state. Therefore the buffers may be tri-stated.

On page 11 of the argument, Applicant argues that "McMahan does not address, teach, or suggest generating a control signal based on the load requirements of the programmable driver as is presently claimed in claim 1, but teaches generating control signals based of a desired output impedance." However, McMahan teaches in col. 2, lines 36+ that "Since the load of an output buffer of a data processor approximates a transmission line at high frequencies, a reflection may occur at the end of the line which may result in ringing and a significant reduction in noise margin. Therfore, a proper impedance value of an output driver circuit of a data processor will prevent undesired reflections of a voltage waveform provided at the output of the data processor." McMahan further teaches in Claim 14 that user of the circuit is allowed "to select a value of the control signal to permit the user of the circuit to select one of a plurality of predetermined, discrete output impedance values for the output terminal of the circuit". Therefore, it can be concluded that the user can select a value of the control signal based on the load requirements, so that "controller (inherent controller that generate signals C0, C1, Cn) operably coupled to generate the drive control signal (C1-Cn) based on load requirements of the line", as set forth in claim 1.

On page 12 of the argument, Applicant argues that "McMahan does not teach or suggest an enable signal in addition to the drive control signal. However, signal C0 is interpreted as an enable signal and C1-Cn is interpreted as the drive control signal.

Claim 7 is similarly rejected as claim 1 discussed above. Therefore, the rejection is maintained.